



United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER OF PATENTS AND TRADEMARKS P.O. Box 1450 Alexandria, Vignisa 22313-1450 www.uspto.gov

		FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
APPLICATION NO.	FILING DATE		108298631US	7237	
10/033,340	12/26/2001	Boon Suan Jeung	10829803103	,25.	
25096 7 PERKINS CO	590 05/22/2003 OIE LLP	EXAMINER			
PATENT-SEA P.O. BOX 124			TRAN, MAI HUONG C		
SEATTLE, WA 98111-1247			ART UNIT	PAPER NUMBER	
			2818		
		DATE MAILED: 05/22/2003			

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No		Applicant(s)				
	10/033,340		JEUNG ET AL.				
Office Action Summary	Examiner		Art Unit				
•	Mai-Huong Tra	n	2818				
The MAILING DATE of this communication ap	pears on the cove	er sheet with the	correspondence a	ddress			
Period for Reply							
A SHORTENED STATUTORY PERIOD FOR REPL THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1. after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a rep - If NO period for reply is specified above, the maximum statutory period - Failure to reply within the set or extended period for reply will, by statut - Any reply received by the Office later than three months after the mailine earned patent term adjustment. See 37 CFR 1.704(b).	136(a). In no event, how	vever, may a reply be t inimum of thirty (30) da e SIX (6) MONTHS froi	imely filed ays will be considered time in the mailing date of this (IED (35 U.S.C. § 133).	ely. communication.			
Status	December 2001						
1) Responsive to communication(s) filed on 26							
	his action is non-		prosecution as to t	he merits is			
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.							
Disposition of Claims	n						
4) \(\sigma\) Claim(s) \(\frac{7-90}{1-90}\) is/are perioding in the application	Claim(s) 1-96 is/are pending in the application.						
4a) Of the above claim(s) <u>1-49</u> is/are withdrawn from consideration.							
5) Claim(s) is/are allowed.							
6)⊠ Claim(s) <u>50-96</u> is/are rejected.							
7) Claim(s) is/are objected to.	ar election requi	roment					
8) Claim(s) are subject to restriction and/or election requirement.							
Application Papers 9) The specification is objected to by the Examin	er.			\			
40. The drawing(s) filed on is/are: a) acc	ented or b)☐ obje	cted to by the Ex	caminer.				
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
Applicant may not request that any objection to the drawing(s) be not an absylated. Good and the control of the drawing correction filed on is: a) approved b) disapproved by the Examiner.							
If approved, corrected drawings are required in reply to this Office action.							
12) The oath or declaration is objected to by the Examiner.							
Priority under 35 U.S.C. §§ 119 and 120							
42\\ Acknowledgment is made of a claim for foreign	an priority under	35 U.S.C. § 119	9(a)-(d) or (f).				
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).							
a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received.							
The second of th							
The state of the priority decuments have been received in this National Stage							
Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.							
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).							
a) ☐ The translation of the foreign language provisional application has been received. 15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.							
Attachment(s)							
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s	4) 5) 2,3,6 . 6)	Interview Sumn Notice of Inform Other:	nary (PTO-413) Paper nal Patent Application (No(s) PTO-152)			
U.S. Patent and Trademark Office	-Action-Summary		Part of Paper No	0.7			

Art Unit: 2818

DETAILED ACTION

Election/Restriction

Application's election without traverse of Group I (Claims 50-96) in Paper No. 5 drawn to a semiconductor device is acknowledged for prosecution in the subject application. Accordingly, claims 1-49 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Applicants have the right to file a divisional application covering the subject matter of the non-elected claims.

Claim Rejections - 35 U.S.C. § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 50-96 are rejected under 35 U.S.C. 103 (a) as being unpatentable over U.S. Patent No. 6,396,975 to Wood et al. in view of Dalal et al. (6,344,234).

Art Unit: 2818

Regarding to claim 50, Wood discloses a microelectronic device package comprising a first microelectronic substrate 12 having a first surface and further having a second surface facing opposite the first surface; a second microelectronic substrate 20 having a first surface and further having a second surface facing opposite the first surface, the second microelectronic substrate being coupled to the first microelectronic substrate to form a substrate assembly with the second surface of the second microelectronic substrate facing toward the first surface of the first microelectronic substrate; and a conformal conductive link 146 coupled between the first and second connection sites, the conductive link 146 conforming at least generally to a contour of the substrate assembly immediately adjacent to the conformal conductive link as set forth in col. 12, lines 3-67, col. 13, lines 1-65, figs. 7a, 9c.

Wood does not disclose a first microelectronic substrate having a first surface with a first connection site and a second microelectronic substrate having a first surface with a second connection site. Dalal teaches a connection site 12 as set forth in col. 6, lines 3-7, fig. 1.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to form a substrate with a connection site, as taught by Dalal in order to provide for a semiconductor module that is low cost, easy to build and has a high process yield (col. 4, lines 26-28).

Claim 51 is rejected under the same rationale set forth above to claim 50.

Art Unit: 2818

Claim 52 is rejected under the same rationale set forth above to claim 50. Claim 53 is rejected under the same rationale set forth above to claim 50. Claim 54 is rejected under the same rationale set forth above to claim 50. Claim 55 is rejected under the same rationale set forth above to claim 50. Claim 56 is rejected under the same rationale set forth above to claim 50. Claim 57 is rejected under the same rationale set forth above to claim 50. Claim 58 is rejected under the same rationale set forth above to claim 50. Claim 59 is rejected under the same rationale set forth above to claim 50. Claim 60 is rejected under the same rationale set forth above to claim 50. Claim 61 is rejected under the same rationale set forth above to claim 50. Claim 62 is rejected under the same rationale set forth above to claim 50. Claim 63 is rejected under the same rationale set forth above to claim 50. Claim 64 is rejected under the same rationale set forth above to claim 50. Claim 65 is rejected under the same rationale set forth above to claim 50. Claim 66 is rejected under the same rationale set forth above to claim 65. Claim 67 is rejected under the same rationale set forth above to claim 65. Claim 68 is rejected under the same rationale set forth above to claim 65. Claim 69 is rejected under the same rationale set forth above to claim 65. Claim 70 is rejected under the same rationale set forth above to claim 65. Claim 71 is rejected under the same rationale set forth above to claim 65. Claim 73 is rejected under the same rationale set forth above to claim 65.

Art Unit: 2818

Claim 74 is rejected under the same rationale set forth above to claim 50. Claim 75 is rejected under the same rationale set forth above to claim 74. Claim 76 is rejected under the same rationale set forth above to claim 74. Claim 77 is rejected under the same rationale set forth above to claim 74. Claim 78 is rejected under the same rationale set forth above to claim 74. Claim 79 is rejected under the same rationale set forth above to claim 74. Claim 80 is rejected under the same rationale set forth above to claim 74. Claim 81 is rejected under the same rationale set forth above to claim 74. Claim 82 is rejected under the same rationale set forth above to claim 74. Claim 83 is rejected under the same rationale set forth above to claim 74. Claim 84 is rejected under the same rationale set forth above to claim 50. Claim 85 is rejected under the same rationale set forth above to claim 84. Claim 86 is rejected under the same rationale set forth above to claim 84. Claim 87 is rejected under the same rationale set forth above to claim 84. Claim 88 is rejected under the same rationale set forth above to claim 84. Claim 89 is rejected under the same rationale set forth above to claim 84. Claim 90 is rejected under the same rationale set forth above to claim 84. Claim 91 is rejected under the same rationale set forth above to claim 84. Claim 92 is rejected under the same rationale set forth above to claim 84. Claim 93 is rejected under the same rationale set forth above to claim 50. Claim 94 is rejected under the same rationale set forth above to claim 93.

Art Unit: 2818

Claim 95 is rejected under the same rationale set forth above to claim 93.

Claim 96 is rejected under the same rationale set forth above to claim 93.

Conclusion

Any inquiry concerning this communication on earlier communications from the examiner should be directed to Mai-Huong Tran, (703) 305-1958. The examiner can normally be reached on Monday-Thursday from 8:00 AM to 6:30 PM. The examiner's supervisor, David Nelms can be reached on (703) 308-4910.

The fax phone number for the organization where this application or proceeding is assigned is (703) 308-7724. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Mai-Huong Tran

HOAI HO PRIMARY EXAMINER